

## North American PHEV Demonstration

**Fleet Summary Report:** Hymotion Prius (V2Green data logger)

**Number of vehicles:** 197

**Reporting Period:** Apr 08 - July 10

## Vehicle Technologies Program

**Date range of data received:**

4/1/2008 to 7/31/2010

**Number of days the vehicles were driven:** 850

### All Trips Combined

Overall gasoline fuel economy (mpg)	48
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	59
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	37
Total number of trips	198,431
Total distance traveled (mi)	1,820,544

### Trips in Charge Depleting (CD) mode <sup>3</sup>

Gasoline fuel economy (mpg)	60
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	120
Number of trips	87,122
Percent of trips city / highway	86% / 14%
Distance traveled (mi)	410,712
Percent of total distance traveled	23%

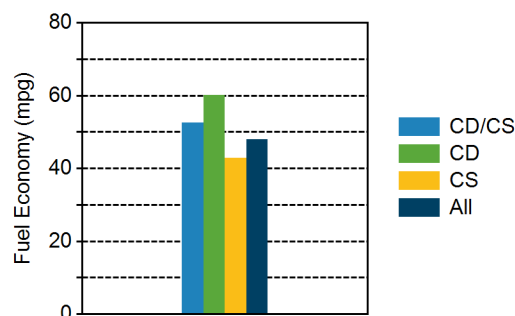
### Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes <sup>5</sup>

Gasoline fuel economy (mpg)	52
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	46
Number of trips	16,600
Percent of trips city / highway	50% / 50%
Distance traveled (mi)	409,405
Percent of total distance traveled	22%

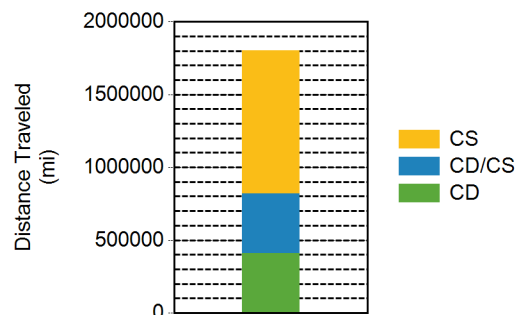
### Trips in Charge Sustaining (CS) mode <sup>7</sup>

Gasoline fuel economy (mpg)	43
Number of trips	91,241
Percent of trips city / highway	76% / 24%
Distance traveled (mi)	981,221
Percent of total distance traveled	54%
Number of trips when the plug-in battery pack was turned off by the vehicle operator <sup>8</sup>	5635
Distance traveled with plug-in battery pack turned off by the vehicle operator (mi) <sup>9</sup>	158,029

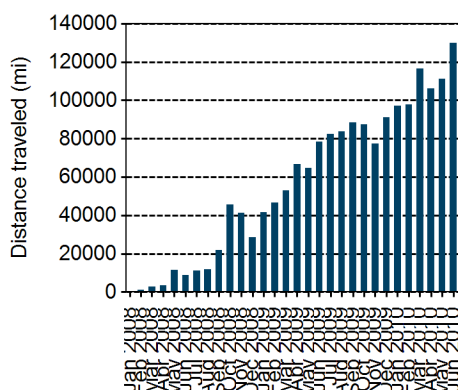
### Gasoline Fuel Economy By Trip Type



### Distance Traveled By Trip Type



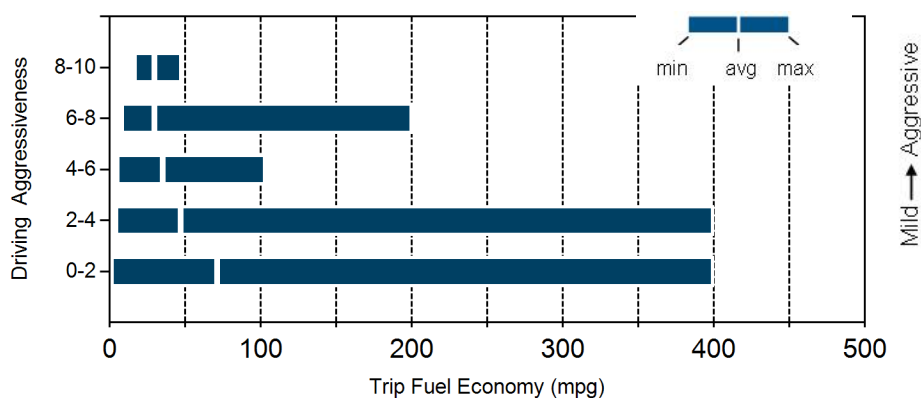
### Miles Logged by Month This Year



Notes: 1 - 9. Please see <http://avt.inel.gov/phev/reportnotes> for an explanation of all PHEV Fleet Testing Report notes.

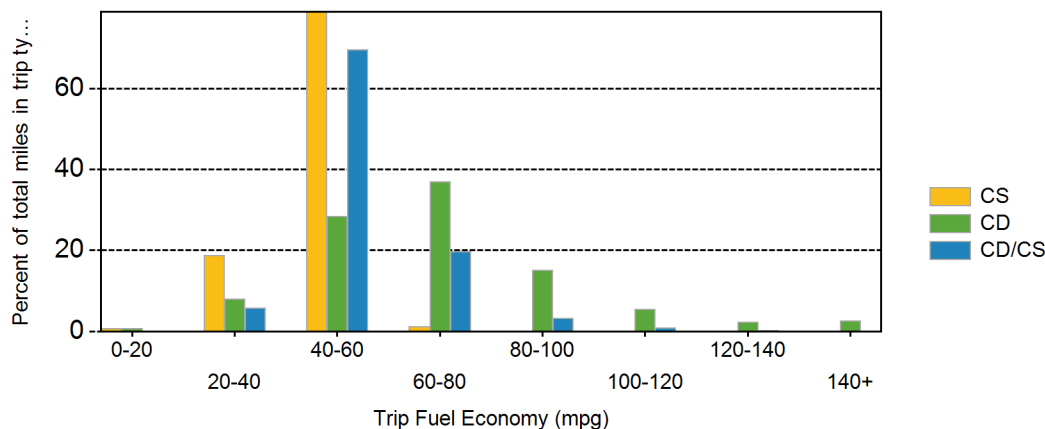
Trips in Charge Depleting (CD) mode		City	Highway
Gasoline fuel economy (mpg)		58	64
DC electrical energy consumption (DC Wh/mi)		144	89
Percent of miles with internal combustion engine off		30%	12%
Average trip aggressiveness (on scale 0 - 10)		1.7	1.7
Average trip distance (mi)		3.1	15.1
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes			
Gasoline fuel economy (mpg)		53	52
DC electrical energy consumption (DC Wh/mi)		75	41
Percent of miles with internal combustion engine off		25%	7%
Average trip aggressiveness (on scale 0 - 10)		1.6	1.6
Average trip distance (mi)		7.7	41.6
Trips in Charge Sustaining (CS) mode			
Gasoline fuel economy (mpg)		37	45
Percent of miles with internal combustion engine off		23%	7%
Average trip aggressiveness (on scale 0 - 10)		1.9	1.7
Average trip distance (mi)		3.4	34.1

### Effect Of Driving Aggressiveness on Fuel Economy This Year



Aggressiveness factor is based on accelerator pedal position. The more time spent during a trip at higher accelerator pedal position, the higher the trip aggressiveness.

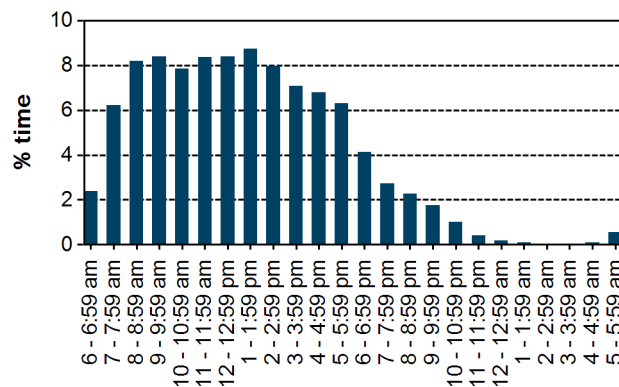
### Trip Fuel Economy Distribution By Trip Type



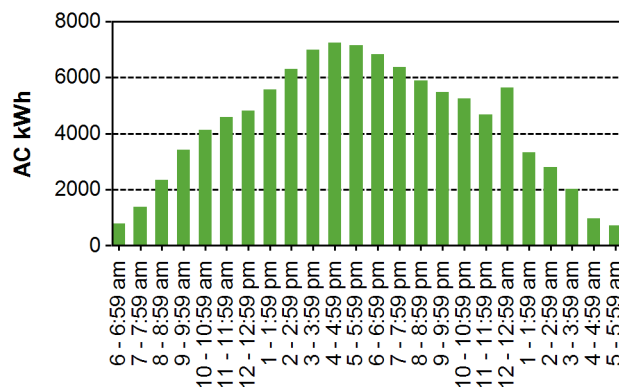
## Plug-in charging

Average number of charging events per vehicle per month when driven	14
Average number of charging events per vehicle per day when vehicle driven	1.0
Average distance driven between charging events (mi)	46.1
Average number of trips between charging events	5.0
Average time plugged in per charging event (hr)	22.1
Average time charging per charging event (hr)	2.8
Average energy per charging event (AC kWh)	2.7
Average charging energy per vehicle per month (AC kWh)	38.0
Total number of charging events	39,481
Total charging energy (AC kWh)	106,614

**Time of Day When Driving**



**Time of Day When Charging**



**Time of Day When Plugging In**

